

REMARKS

Claims 1-23 remain in the application.

Claim Rejections -- 35 U.S.C. 103(a)

A. Claims 1, 7, 17 and 23

Claims 1, 7, 17 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. (Pub. No. 2006/0109853). Applicants respectfully traverse this rejection.

Claim 1 recites as follows.

1. A method of load balancing between a plurality of routers by automated resetting of gateways, the method comprising:
 - receiving a packet at a first router from a source host to be forwarded to a destination host;
 - applying an algorithm at the first router to select a second router to be a next **gateway** for the source host for packets destined to the destination host; and
 - sending** an ICMP **redirect** message from the first router to the source host to reset a default gateway of the source host to be the second router for packets destined to the destination host.

(Emphases added.)

As recited above in claim 1, an algorithm is applied at a first router to select a second router to be a next **gateway** for the source host for packets destined to the destination host. In addition, the claim recites that an ICMP **redirect** message is **sent** from the first router to the source host to reset a default gateway of the source host to be the second router for packets destined to the

destination host. Applicants respectfully submit that *neither* of these claim limitations are disclosed or suggested by the cited art.

First, regarding the claimed feature of “applying an algorithm at the first router to select a second router to be a next **gateway** for the source host for packets destined to the destination host” (emphasis added), the latest office action states that Lamberton et al. does not disclose this feature. (Page 4, lines 15-16 of the latest office action.) Applicant agrees with this statement.

The latest office action goes on to assert that paragraphs 0040-0043, 0047-0051, fig. 1, and fig. 2 of Matsuzawa et al. disclose this feature. Applicant disagrees with this assertion.

As explained in the rejection in regard to Matsuzawa et al., “the router device 101 can recognize that the network 120 is reachable at the same cost by adopting either one of a route via the router device 102 or 103. ... The routing table 203 is a table used in obtaining (searching) a **next hop router** from the destination address.” (Page 4, line 21 through page 5, line 2 of the latest office action.) However, applicants respectfully submit that selecting a **next hop router** (for forwarding a packet between routers) is technically very different in function, way and result than the claimed feature of selecting a router to be a next **gateway** (which is a local destination on the LAN for a packet destined for outside the LAN).

Each next hop router is a **subsequent router along a path** through a network of routers between a source and destination. In contrast, a gateway is generally an **initial router on the LAN** for a packet destined outside the LAN.

Therefore, applicant respectfully submits that the claimed feature of “applying an algorithm at the first router to select a second router to be a next **gateway** for the source host for packets destined to the destination host” is not disclosed or suggested by Lamberton et al. in view of Matsuzawa et al.

Second, regarding the claimed feature of “**sending** an ICMP **redirect** message from the first router to the source host to reset a default gateway of the source host to be the second router for packets destined to the destination host” (emphases added), the latest office action asserts as follows. “In the background of Lamberton et al. it is stated that there are a number of methods that an end-host can use to determine its first hop router towards a particular IP destination, and these methods can be RIP, or ICMP. Thus, it is obvious for the mediator to send an ICMP message to inform the host to forward the subsequent packets to the newly selected router.” Applicants respectfully disagree with this assertion.

The background of Lamberton et al. merely mentions the use of **Router Discovery** of the Internet Control Message Protocol (ICMP) (col. 1, lines 34-35). As explained in Lamberton, “In ICMP Router Discovery, the host keeps track of operative routers by **listening** for **router reach ability** messages. These messages contain a list of IP addresses of usable routers together with preference values for those routers” (col. 1, lines 45-49, emphases added). There is no mention or suggestion in Lamberton et al. of the claimed feature of **sending** an ICMP **redirect** message to reset a default gateway of the source host.

The disclosure of Matsuzawa et al. does not cure this deficiency of Lamberton et al.

Therefore, applicant respectfully submits that the claimed feature of “**sending** an ICMP **redirect** message from the first router to the source host to reset a default gateway of the source host to be the second router for packets destined to the destination host” (emphases added) is not disclosed or suggested by Lamberton et al. in view of Matsuzawa et al.

Thus, applicant respectfully submits that claim 1 overcomes its rejection for one or both of the above-discussed reasons.

Claim 7 recites, “a selection module configured to apply an algorithm to select another router to be a next **gateway** of the source host ...” and “a transmission module configured to **send** an ICMP **redirect** message to the source host to reset a current gateway ...” (emphases added). Therefore, claim 7 also overcomes this rejection for one or both of the reasons discussed above in relation to claim 1.

Claim 17 recites, “performing the **automated selection of the router to respond to the ARP request by applying an algorithm at each router** to determine which single router is to respond to the ARP request” and “**sending an ARP reply from the responding router** to the requesting host.” Applicant respectfully submits that these limitations are not disclosed or suggested by Lamberton et al. in view of Matsuzawa et al.

The latest office action asserts that col. 4, lines 60-67, col. 5, lines 1-15 and fig. 4 of Lamberton et al. discloses these claim limitations. Applicant disagrees with this assertion. The citation to Lamberton et al. actually teaches that “**only mediator [420] is going to respond** with an ARP Response [465]” (col. 5, lines 2-3, emphasis added). This teaching is contrary to the claimed feature of the ARP reply being sent from the **responding router**.

The disclosure of Matsuzawa et al. does not cure this deficiency of Lamberton et al.

Thus, claim 17 overcomes this rejection.

Claim 23 overcomes its rejection for the reason discussed above in relation to claim 17.

B. Claims 2, 4, 5, 8, 10-12 and 18-19

Claims 2, 4, 5, 8, 10-12 and 18-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al. in view of Matsuzawa et al. further in view of Inoue et al. This rejection is respectfully traversed.

Claims 2, 4, and 5 depend from claim 1. Applicant respectfully submits that claims 2, 4, and 5 are patentable over Lamberton et al. in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 1. Inoue et al. is cited in relation to a pseudo-random algorithm and does not cure the above-discussed deficiencies of Lamberton et al. in view of Matsuzawa et al. Therefore, applicant respectfully submits that claims 2, 4 and 5 overcome this rejection.

Claims 8 and 10-12 depend from claim 7. Applicant respectfully submits that claims 8 and 10-12 are patentable over Lamberton et al. in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 7. Inoue et al. is cited in relation to a pseudo-random algorithm and does not cure the above-discussed deficiencies of Lamberton et al. in view of Matsuzawa et al. Therefore, applicant respectfully submits that claims 8, 10-12 and 16 overcome this rejection.

Claims 18-19 depend from claim 17. Applicant respectfully submits that claims 18-19 are patentable over Lamberton et al. in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 17. Inoue et al. is cited in relation to a pseudo-random algorithm and does not cure the above-discussed deficiencies of Lamberton et al. in view of Matsuzawa et al. Therefore, applicant respectfully submits that claims 18-19 overcome this rejection.

C. Claims 3, 6, 9, 13, 15, and 21-22

Claims 3, 6, 9, 13, 15, and 21-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al. in view of Matsuzawa et al. further in view of Datta et al. This rejection is respectfully traversed.

Claims 3 and 6 depend from claim 1. Applicant respectfully submits that claims 3 and 6 are patentable over Lamberton et al. in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 1. Datta et al. is cited in relation to round robin type selection and does not cure the above-discussed deficiencies of Lamberton et al. in view of Matsuzawa et al. Therefore, applicant respectfully submits that claims 3 and 6 overcome this rejection.

Claims 9, 13 and 15 depend from claim 7. Applicant respectfully submits that claims 9, 13 and 15 are patentable over Lamberton et al. in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 7. Datta et al. is cited in relation to round robin type selection and does not cure the above-discussed deficiencies of Lamberton et al. in view of Matsuzawa et al. Therefore, applicant respectfully submits that claims 9, 13 and 15 overcome this rejection.

Claims 21-22 depend from claim 17. Applicant respectfully submits that claims 21-22 are patentable over Lamberton et al. in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 17. Datta et al. is cited in relation to round robin type selection and does not cure the above-discussed deficiencies of Lamberton et al. in view of Matsuzawa et al. Therefore, applicant respectfully submits that claims 21-22 overcome this rejection.

D. Claim 14

Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. further in view of Datta et al. and Lamberton et al. (Pat. No. 7,003,581). This rejection is respectfully traversed.

Claim 14 depends from claim 7. Applicant respectfully submits that claim 14 patentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 7. Datta et al. and Lamberton et al. (Pat. No. 7,003,581) do not cure the above-discussed deficiencies of Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. Therefore, applicant respectfully submits that claim 14 overcomes this rejection.

E. Claim 16

Claim 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. further in view of Datta et al. and Inoue et al. This rejection is respectfully traversed.

Claim 16 depends from claim 7. Applicant respectfully submits that claim 16 patentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 7. Datta et al. and Inoue et al. do not cure the above-discussed deficiencies of Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. Therefore, applicant respectfully submits that claim 16 overcomes this rejection.

F. Claim 20

Claim 20 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. further in view of Inoue et al. and Blair. This rejection is respectfully traversed.

Claim 20 depends from claim 17. Applicant respectfully submits that claim 20 patentable over Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. for at least the same reasons discussed above in relation to claim 17. Inoue et al. and Blair do not cure the above-discussed deficiencies of Lamberton et al. (Pat. No. 6,754,220) in view of Matsuzawa et al. Therefore, applicant respectfully submits that claim 20 overcomes this rejection.

Conclusion

For the above-discussed reasons, applicant believes that the pending claims, as amended, now overcome the objections and rejections of the latest office action. Favorable action is respectfully requested.

If for any reason an insufficient fee has been paid, the Commissioner is hereby authorized to charge the insufficiency to Deposit Account No. 08-2025.

Respectfully Submitted,

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